

## Weatherization Expands Access to Energy Savings

As one of the first colonies to declare independence, New Hampshire values the benefits of democracy, like freedom of speech and access to information. In 1883, New Hampshire opened the first free public library. New Hampshire also believes that everyone should have access to a warm, safe home. But intense winter weather can make this difficult, especially for low-income families. To address this situation, New Hampshire partners with the U.S. Department of Energy (DOE) to implement the Weatherization Assistance Program (Weatherization). Weatherization reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. In New Hampshire, this burden is heightened by the state's high energy costs. While New Hampshire utilizes hydroelectricity for 43% of its energy, the state still relies on imported fossil fuels, like coal and natural gas, to power its economy. This dependency has driven up energy costs.

Low-income families often have to cut back on other necessities to pay their energy bills. This burden becomes even more unmanageable when energy prices soar or temperatures drop.

New Hampshire's Weatherization Program prioritizes services to the elderly, people with disabilities, and families with children. These low-income households are often on fixed incomes or rely on income assistance programs and are most vulnerable to volatile changes in energy markets. Weatherization measures offer long-term relief for low-income families and provide a buffer against future fluctuations in energy prices and supplies.

### NATIONAL WEATHERIZATION PROGRAM

Homes weatherized in 1999	68,000
DOE allocations in 1999	\$135 million
Average annual energy cost savings per household	\$300
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$2.10
Jobs supported	7,000

### NEW HAMPSHIRE

Homes weatherized in 1999 (with DOE \$)	312
DOE funding in 1999	\$869,837
Clients served in 1999	646
Elderly	24%
People with disabilities	20%
Families with children	11%

### AN ENERGY EFFICIENCY RESOURCE

The Governor's Office of Energy and Community Services partners with DOE to administer New Hampshire's program and six local agencies deliver weatherization services to eligible residents throughout the state. When the program began, temporary measures, like covering windows with plastic, were emphasized. Today, Weatherization has evolved into a sophisticated program that employs advanced technology and professionally trained crews.

New Hampshire crews use a computerized energy audit to determine the most cost-effective energy efficiency measures appropriate for each home. Additional diagnostic tools, like the blower door, manometer, and infrared camera, are used to detect air infiltration, duct leaks, and pressure imbalances. Weatherization crews also test heating units and appliances for carbon monoxide and gas leaks.

Typical weatherization services include installing insulation in the floor, ceiling, and walls; repairing and sealing ducts; repairing and cleaning heating systems; and mitigating heat loss through windows, doors, and other infiltration points. Clients are also educated on the proper use and maintenance of the installed measures.

New Hampshire crews receive technical training at national conferences, regional training meetings, and in the field. These highly skilled technicians provide comprehensive energy efficiency solutions for low-income families and serve as a resource to the community. Local agencies can bridge the delivery gap between federal, state, and community programs and agencies.

#### CATALOGING THE BENEFITS

Weatherization creates important economic benefits for low-income households, which helps them become more self-sufficient. Often, clients are equally thankful for the increase in comfort and improvement in safety conditions. Pat Smalley\*, a recipient of weatherization services from Bedford, was grateful when the local agency replaced her ailing furnace with a safer, more efficient unit. The following winter, Pat noticed a sharp reduction in her energy bills and remarked, "Whenever the house is warm and snug on a cold and windy winter day, I am grateful to you."

Theresa Patton\* initially called her local agency in Hillsborough county for help with mounting oil bills. A few days later, her furnace failed. The agency provided immediate bill assistance through a partner program, and sent a weatherization inspector to conduct an energy audit on her home. To Theresa's surprise, Weatherization replaced her furnace, at no cost, and installed energy efficiency measures throughout her home. Theresa can now keep her family warm and afford her lower energy bills without additional assistance.



*Weatherization technician encounters a common source of air infiltration.*

Weatherization measures create benefits for the entire community as well. Weatherization reduces the export of energy dollars and keeps more money in the community. This spurs local economic growth and creates additional jobs. In addition, reducing residential energy demand decreases

electricity generation and avoids emissions of nitrogen oxides, sulphur dioxide, and other pollutants. This improves local air quality and reduces adverse health effects, particularly asthma.

#### WEATHERIZATION WORKS!

Weatherization produces an impressive range of benefits for low-income households and communities. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for New Hampshire and America!

*\*Names have been changed to protect the privacy of the subjects.*



#### TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

Weatherization Assistance Program • U.S. Department of Energy, EE-42  
1000 Independence Avenue, SW • Washington, DC 20585-0121 • (202) 586-4074

Visit the Weatherization Web site at: [www.eren.doe.gov/buildings/weatherization\\_assistance](http://www.eren.doe.gov/buildings/weatherization_assistance)  
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732



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